## JONES DAY

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## November 4, 2019

## BY ELECTRONIC DELIVERY

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street S.W. Washington D.C. 20554

Re: Permitted Written Ex Parte Notice
Wireless E911 Location Accuracy Requirements
PS Docket No. 07-114

Dear Ms. Dortch:

NextNav, LLC ("NextNav"), through its counsel, hereby provides the following comments and suggestions with respect to the Further Notice portion of the Commission's draft Fifth Report and Order and Fifth Further Notice of Proposed Rulemaking ("draft Order" or "draft Further Notice") in the above captioned proceeding. <sup>1</sup>

The Commission's draft Further Notice appropriately identifies the need to continue to improve the 3 meter vertical location metric and to facilitate "efforts to convert z-axis data to precise floor level." The Further Notice requests comment on measures to achieve both of these goals, but does not make reference to improvements that have already been identified as necessary to convert z-axis data to precise floor level information. Specifically, as the Commission acknowledges in Footnote 131 of the draft Order, "regardless of the precision of the vertical location information, the current requirement of a horizontal location fix within 50 meters does not provide sufficient accuracy to reliably place a wireless caller in a particular building." Given this fact, the Further Notice should make specific reference to the discussion in Footnote 131 and request comment on whether the Commission should tighten its horizontal location metric in order

<sup>&</sup>lt;sup>1</sup> Wireless E911 Location Accuracy Requirement, FCC-CIRC1911-02, Fifth Report and Order and Fifth Further Notice of Proposed Rulemaking, PS Docket No. 07-114, ¶ 63 (Oct. 29, 2019).

 $<sup>^{2}</sup>$  *Id.*, ¶ 63.

 $<sup>^{3}</sup>$  *Id.*, ¶ 33, n.131.

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to facilitate the ability to identify the corresponding floor level from coordinate-based location information.

Second, the Further Notice appropriately requests comment on the impact of power outages on z-axis technology.<sup>4</sup> As the Commission is aware, power outages no longer occur solely in emergencies, but are now routine events in California and other Western states. Thus, the impact of power outages on all location technologies should be considered by the Commission. The Further Notice should therefore additionally request comment on the impact of power outages on horizontal location accuracy and address-based dispatchable location technologies, such as the National Emergency Address Database ("NEAD").

Third, the Further Notice acknowledges that "the NEAD faces challenges that could slow down implementation of dispatchable location" and therefore requests comment on potential improvements to the NEAD, such as permitting the use of non-NEAD reference points.<sup>5</sup> The Further Notice, however, does not request comment on any procedures that would quantify and verify these improvements, such as requiring the use of address-based (DL) accuracy testing and reporting requirements (including confidence and uncertainty reporting) to ensure that any changes to the NEAD or other address-based DL technologies actually succeed in improving wireless location accuracy to support public safety.<sup>6</sup>

Fourth, the Further Notice makes a number of references to "handset-based" versus "network-based" vertical location technologies, but does not define these terms or employ them in a manner that is consistent with the Commission's prior use of these terms. The Commission should therefore clarify in its Further Notice that handset-based means that the location determination is calculated in the handset, rather than at an external point within a network. Based on this definition, the Commission should acknowledge that, unlike GPS, many present day handset-based z-axis technologies, such as those of NextNav and Polaris, do require network data points or infrastructure—including sensor stations, Wi-Fi access points or bluetooth beacons—to provide highly accurate vertical location information. These handset-based location technologies

<sup>&</sup>lt;sup>4</sup> See id., ¶ 62.

<sup>&</sup>lt;sup>5</sup> *Id.*, ¶ 76.

<sup>&</sup>lt;sup>6</sup> See, e.g., Letter from Jeffrey S. Cohen, APCO Chief Counsel, and Mark S. Reddish, APCO Senior Counsel, to Marlene H. Dortch, Secretary, Federal Communications Commission, PS Docket 07-114, at 4 (Oct. 25, 2019) (observing that the current rules "impose a deployment requirement, as opposed to requiring delivery of dispatchable location or z-axis information with a certain percentage of 9-1-1 calls")

<sup>&</sup>lt;sup>7</sup> See, e.g., Further Notice,  $\P\P$  68-72.

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would need to employ some degree of additional infrastructure in order to provide services on a nationwide basis, as identified for comment in the Further Notice.<sup>8</sup>

Thank you for your attention to this matter. Please contact the undersigned if you have any questions.

Sincerely

Bruce A. Olcott

<sup>&</sup>lt;sup>8</sup> See id., ¶¶ 70-71 and 73.